**I. Title:** Application for an Individual Incidental Take Permit under the Endangered Species Act of 1973. Idaho Recreational Fishing Program - (Current Permit No. 1233)

**II. Date:** February 25, 2004

**III. Applicant**: Idaho Department of Fish and Game

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# IV. Introduction and Background:

The Idaho Department of Fish and Game (Department) was issued permit 844 by the National Marine Fisheries Service (NOAA Fisheries) on May 20, 1993. The purpose of Permit #844 was to allow the incidental take of Snake River salmon and steelhead listed under the Endangered Species Act (ESA) as a result of sport fishing programs in Idaho under the authority of the Department. These programs include; 1) fisheries for resident species managed under the state's General Fishing Regulations, 2) fisheries for anadromous spring/summer chinook salmon (Oncorhynchus tshawytscha) managed under the state's Anadromous Salmon Fishing Regulations, and 3) fisheries for summer steelhead (O. mykiss) managed under the state's Steelhead Fishing Regulations. The permit covered the incidental take of listed Snake River sockeye salmon (O. nerka. Endangered November 1991), spring/summer and fall chinook salmon (O. tshawytscha, Threatened, April 1992) and summer steelhead (O. mykiss, Threatened, August 1997). Modification 5 of Permit #844 expired April 30, 1998. Subsequently, Permit #1150 was issued to the Department on May 28, 1999 to replace Permit #844. Permit #1150 expired on December 31, 1999. Permit 1233 was issued on May 26, 2000 to replace Permit 1150. Permit 1233 was modified on December 6, 2002 and expires on December 31, 2004.

The purpose of this application is to modify the incidental mortality sliding scale take authority in Permit 1233 and provide needed flexibility in the dates and locations of spring/summer chinook fisheries starting in 2004 for a five year period. Although Permit 1233 does not expire until December 2004, NOAA Fisheries staff has indicated that modification would require as much work, as would issuing a new permit. The proposed changes from the current Permit 1233 are described in more detail in Section V.

Life history, seasonal distribution, habitat needs, status, and related biological information on ESA listed spring/summer chinook, fall chinook, summer steelhead and

sockeye salmon is the subject of great interest to NOAA Fisheries, state fishery agencies, and tribal governments. As such, a vast amount of information is generated each year. This information is readily available, and well known. The most current stock status document is:

West Coast Salmon Biological Review Team. 2003. Preliminary conclusions regarding the updated status of listed ESUs of West Coast salmon and steelhead. Comanager review draft, February 2003. NOAA Fisheries. Seattle.

Rather than repeating this information, and related information requested in the instruction packet, we incorporate this report and the following documents in this application by reference.

- Idaho Department of Fish and Game. 1993. Application for the Individual Incidental Take Permit for Sport Fisheries under the Endangered Species Act. IDFG Boise, March 15, 1993.
- Interior Columbia Basin Technical Recovery Team. July 2003. Working Draft Independent populations of chinook, steelhead, and sockeye for listed evolutionarily significant units within the Interior-Columbia River Domain. NOAA Fisheries, Seattle. 171 pgs.
- Marmorek, D.R. (Editor) and twenty-one additional authors. 1996. Plan for analyzing and testing hypotheses (PATH): final report on retrospective analyses for fiscal year 1996. Compiled and edited by ESSA Technologies Ltd., Vancouver, B.C.
- National Marine Fisheries Service 2002. Biological Opinion: Issuance of Modification 1 to Section 10(a)(1)(B) Incidental Take Permit 1233 for Recreational Fisheries Conducted by Idaho Fish and Game. Consultation Number F/NWR/2001/01465. NOAA Fisheries, Portland. 62 pgs.
- State of Idaho. 1997. State of Idaho comments to the National Marine Fisheries Service. Proposed Listing of Snake River Steelhead for Protection under the Federal Endangered Species Act. Capitol Building. Boise, Id. 53 p. plus figures, tables, and appendices.
- U.S. Department of Commerce. National Oceanic and Atmospheric Administration. 1991. 50 CFR Part 222. Endangered and Threatened Species; Endangered Status for Snake River Sockeye Salmon. Final Rule. Vol. 56, No. 224. pp 58619-58624. November 20, 1991.
- U.S. Department of Commerce. National Oceanic and Atmospheric Administration. 1991. 50 CFR Part 227. Endangered and Threatened Species; Threatened Status for Snake River spring/summer chinook salmon and Snake River Fall Chinook Salmon. Final Rule. Vol. 57, No. 78. pp 14653-14663. April 22, 1992.

U.S. Department of Commerce. National Oceanic and Atmospheric Administration. 1991. 50 CFR Parts 222 and 227. Endangered and Threatened Species: Listing of several Evolutionarily Significant Units (ESUs) of West Coast Steelhead. Final Rule. Vol. 62, No. 159. pp 43973-43976. August 18,1997.

## V. Description of Proposed Activity:

The proposed activities are very similar to those described in Permit 1233; the primary differences are:

- 1. To modify the sliding scale authorized in Modification 1 to Permit 1233 by adding the interim abundance target for summer run fish to the existing interim abundance target of spring run fish which and applying the same percent mortality rates to the same percent of annual abundance.
- 2. Provide flexibility in the precise dates and locations of proposed selective fisheries for adipose clipped fish, subject to the existing annual review process already established in Permit 1233.

Requested activities for incidental take authorization pursuant to the Department's fishing regulations are summarized below.

## General Fishing Regulations:

Mainstem Rivers and Tributaries. The general statewide stream-fishing season in Idaho runs from the Saturday of Memorial Day Weekend through November 30. Exceptions to the general stream-fishing season include certain river sections that are open year-round and rivers or stream sections that are closed to fishing for all, or part of the general stream-fishing season. General resident fishing targets resident species in the Salmon River sub-basin, the Clearwater River sub-basin, and the Snake River below Hells Canyon Dam. The incidental take of ESA-listed fish may occur when adult, jack, or juvenile, Snake River spring/summer or fall chinook salmon, sockeye or steelhead are mistaken for resident species and harvested unintentionally or as a result of hooking mortalities when listed species are caught and released by anglers.

Redfish, Alturas, and Pettit Lakes. Kokanee fishing is allowed in Redfish, Alturas, and Pettit Lakes. The purpose of the fishery is to reduce the kokanee population in the Stanley Basin lakes because kokanee are a direct competitor with captive brood sockeye salmon for habitat and food. Anglers are directed to avoid harvesting externally marked hatchery fish.

#### **Anadromous Salmon Fishing Regulations:**

To ensure consistency with the terms of a permit issued as a result of this application, proposed fisheries for chinook salmon under the Anadromous Fishing Regulations would be subject to annual review by NOAA Fisheries in the Northwest Region. The review

will focus on; 1) the projected return of naturally produced listed adults, listed and non-listed hatchery-produced adult salmon to the respective watersheds, 2) the forecasted encounter rates of unlisted and listed fish, 3) the proposed season dates, locations, and other activities tailored to minimize the mortality of ESA-listed fish in the watershed, and 4) the annual incidental take caps described below. The Department will terminate fisheries when the state's harvest objective is achieved, the authorized mortality level of ESA-listed adult fish is reached, or when the specified termination date is reached for each recreational fishery, whichever occurs first. We describe maximum boundaries and dates for purposes of framing the scope of authorization assessment. Specific boundaries and dates tailored to meet specific fishery needs and conditions will be assessed during the annual review process and will be with in the ranges provided in this application.

Little Salmon River. The Little Salmon River chinook salmon fishery occurs from approximately mid-April until either the incidental take quota is reached, the State's harvest objective is attained, or August 7, whichever comes first, and is targeted at unlisted fish returning to the Rapid River Fish Hatchery and releases of Rapid River hatchery fish in the upper reaches of the Little Salmon River. Any ESA-listed adult fish that are taken incidentally in this fishery are fish that are bound for the Little Salmon River. Harvest typically takes place in the Little Salmon River from its mouth upstream to the Smokey Boulder Bridge, a distance of about 25 miles, but boundaries and dates may be further restricted in a given year. The amount of suitable spawning habitat and the numbers of natural spawners in the Little Salmon River and its tributaries are limited and there is evidence of significant hatchery influence in the natural spawning population.

Lower Salmon River. The lower Salmon River chinook salmon fishery occurs from approximately mid-April until either the annual incidental take quota is reached, the State's harvest objective is attained or August 7, whichever comes first, and may harvest hatchery-produced fish returning to the Rapid River Fish Hatchery, McCall Fish Hatchery, Pahsimeroi Fish Hatchery and/or Sawtooth Fish Hatchery depending upon timing of the fishery, and the number of harvestable spring/summer chinook returning to these facilities in a year. ESA-listed fish are bound for the Little Salmon River and tributaries further upstream. The fishery may occur in the Salmon River from its mouth upstream to the mouth of the South Fork Salmon River, but may be further restricted in a given year. The amount of natural spawning in this section of the Salmon River and its tributaries is limited; however, chinook salmon destined for spawning areas further upstream must pass through this river reach.

Snake River, Imnaha River upstream to Hells Canyon Dam. The Snake River chinook fishery from the Imnaha River to Hells Canyon Dam occurs from approximately mid-April until either the annual incidental take quota is reached, the State's harvest objective is attained, or August 7, whichever comes first, and is targeted at surplus, unlisted, hatchery-produced fish of the Rapid River stock returning to Hells Canyon Dam Fish Trap. Any ESA-listed adult fish that are incidentally caught and released in this fishery are believed to be strays from other drainages because there is very limited production of spring chinook in the Hells Canyon reach of the Snake River and the canyon tributaries.

The fishery typically takes place In the Snake River from a posted line upstream from the mouth of the Imnaha River upstream to a posted line downstream from Hells Canyon Dam, a distance of about 60 miles. This reach of the Snake River forms the boundary between the states of Idaho and Oregon. Anglers from either state may fish these boundary waters subject to ODF&W adopting reciprocal regulations and reporting harvest and incidental take consistent with the conditions in this application. Joint fisheries in this reach of the Snake River will be reported by the Department to ensure that harvest objectives are not exceeded.

Snake River, from Lewiston, Idaho to Heller Bar. The chinook salmon fishery in this reach of the Snake River may occur from mid-April until August 7, or until either the annual incidental take quota is reached or the harvest objective is attained. The fishery may harvest unlisted hatchery-produced chinook salmon destined for the Clearwater River, Rapid River Hatchery, Hells Canyon Dam/Oxbow, McCall Fish Hatchery, Pahsimeroi Fish Hatchery, and Sawtooth Fish Hatchery. The fishery may also incidentally harvest listed adipose clipped hatchery-origin spring/summer chinook returning to the, Pahsimeroi Hatchery, Sawtooth Hatchery, Imnaha, or Grande Ronde rivers depending upon timing of the fishery, and the number of fish returning to these facilities each year. Open waters may include the mainstem of the Snake River from the Southway Bridge between Lewiston, Idaho and Clarkston, Washington upstream approximately 23 miles to the Heller Bar boat ramp. This reach of the Snake River forms the boundary between the states of Idaho and Washington. Anglers from either state may fish these boundary waters, subject to adoption of reciprocal fishing regulations by both states. Idaho anglers would fish in this area under terms of this permit application. Currently, incidental take for Washington anglers is covered under a Section 7 consultation for the mainstem Columbia River fisheries. The Department and the Washington Department of Fish and Wildlife (WDF&W) will coordinate incidental take accounting and reporting for this fishery should WDF&W adopt reciprocal fishing regulations. WDF&W may fish under this permit, contingent upon Department approval, or may fish pursuant to a Section 7 consultation or a separate Section 10 permit. The Department will report joint fisheries in this reach of the Snake River, consistent with permit authorization.

Clearwater River. This fishery includes the North Fork Clearwater River from its mouth upstream to Dworshak Dam at river km 3.0, the Clearwater River from it mouth at Lewiston, Idaho upstream to about river mile 100, the South Fork Clearwater River, Clear Creek, the Middle Fork, and the Lochsa River. Since chinook salmon from the Clearwater River are not listed under the ESA, no incidental take of ESA-listed spring/summer chinook salmon is expected. Current Department regulations only allow for the harvest of adipose fin-clipped hatchery fish. Future fisheries may allow for the harvest of unlisted fish with adipose fins. Harvest typically occurs between April 15 and August 7. The August 7 closure date helps minimize the take of ESA-listed fall chinook.

South Fork Salmon River. The South Fork Salmon River fishery typically occurs from early June until either the annual incidental take quota is reached, the State's harvest objective is attained, or August 7, whichever comes first. The fishery harvests unlisted,

hatchery-produced summer chinook returning to the South Fork Fish Trap. The fishery's current maximum boundary is between the mouth of the East Fork of the South Fork and the South Fork Trap because this is currently the fishing area for which incidental take standards are defined. However, if take standards are developed for other tributaries in the drainage, the downstream boundary may be moved further downstream to account for incidental take of other populations in the drainage. Incidental take terms and conditions of this fishery are subject to annual review and approval by NOAA Fisheries under the standards established by NOAA Fisheries in it 2000 Biological Opinion (NMFS 2000). A copy the standards that NOAA will use in 2004, and into the near future are described in Dygert (2004); a copy of these standards is attached.

# **Steelhead Fishing Regulations:**

Waters open to harvest of steelhead include 1) in the Clearwater River from its mouth upstream to Clear Creek, the South Fork Clearwater River upstream to Red River, and the North Fork Clearwater River upstream to Dworshak Dam; 2) in the Snake River from Lewiston, upstream to Hells Canyon Dam, 3) in the Salmon River upstream to a posted boundary 100 yards downstream of the Sawtooth Hatchery weir, and the Little Salmon River upstream to U.S. Highway 95 bridge near Smokey Boulder Road. Steelhead may be retained by sport fishermen starting on September 1 on the Snake and Salmon Rivers, on the Clearwater River below Memorial Bridge on August 1, and on October 15 on the Clearwater River upstream of Memorial Bridge. The steelhead sport-fishery closes on April 30 for the Snake and Clearwater Rivers, on May 15 in the Little Salmon River, on March 31 in the Salmon River from its mouth upstream to Long Tom Creek, and on April 15 in the upper Salmon River. Only non-listed, hatchery-produced steelhead, with a clipped adipose fin as evidence by a healed scar may be harvested during open steelhead seasons. Steelhead without a clipped adipose fin as evidenced by a healed scar must be immediately released unharmed. An incidental take of listed, naturally produced steelhead and fall chinook salmon may occur due to hooking and release injuries. No listed spring/summer chinook or sockeye are expected to be present during spring or fall steelhead fishing.

#### VI (A). Anticipated Impact on Listed Species

The primary impact on listed species caused by recreational anglers is the mortality caused by incidentally catching and subsequently releasing listed fish when fishing for unlisted fish.

<u>General Fishing Regulations.</u> The expectation of the maximum number listed fish that may be encountered, and that may subsequently die during implementation of the General Fishing Regulations is:

1) The incidental harvest of up to 10 adult threatened, Snake River spring/summer chinook salmon and the incidental catch and release of up to 60 adult, threatened, Snake River spring/summer chinook salmon, of which 6 may die.

- 2) The incidental catch and release of up to 500 juvenile, threatened, Snake River spring/summer chinook salmon, of which 50 may die.
- 3) The incidental catch and release of up to 10 adult, threatened, Snake River fall chinook salmon, of which 1 may die.
- 4) The incidental catch and release of up to 10 threatened, adult Snake River Basin steelhead, of which 1 may die.
- 5) Redfish, Alturas, and Pettit Lakes:
  - a) Up to 34 residual adult and/or juvenile, endangered, naturally-produced (unmarked), Snake River sockeye salmon may be harvested incidental to a kokanee fishery at Redfish, Alturas, and/or Pettit Lakes.
  - b) Up to 30 juvenile, endangered, hatchery-produced (marked), Snake River sockeye salmon may be harvested incidental to a resident trout fishery at Redfish, Alturas, and/or Pettit Lakes.

<u>Anadromous Fishing Regulations</u>. The expectation of the maximum number listed <u>adult</u> fish that may be encountered, and that may subsequently die during implementation of the Anadromous Fishing Regulations is:

- 1. When less than 4,000 adult naturally produced spring/summer chinook salmon are predicted to migrate over Lower Granite Dam, and the predicted number of unlisted hatchery-origin spring chinook returning to the Rapid River Hatchery is more than that required to meet broodstock goals, the Department may conduct a recreational fishery targeting this stock in the Little Salmon River. When the run size is less than 4,000 no more than 80 adult, listed naturally produced, Snake River spring/summer chinook salmon will be allowed to be caught and released in the Little Salmon River, of which up to 8 may die, incidental to the harvest of unlisted artificially-propagated (adipose fin-clipped), spring/summer chinook salmon.
- 2. When more than 4,000 naturally produced spring/summer chinook salmon are predicted to migrate over Lower Granite Dam, and the predicted number of unlisted hatchery-origin spring/summer chinook is more than that required to meet broodstock goals, the Department may conduct a recreational fishery on the Snake River, Lower Salmon River, and/or the Little Salmon River. When conducting such fisheries, in addition to the take in paragraph 1 above, the Department will allow no more fish to be incidentally caught and released than identified in Table 1 which is based on the allowable rates in Permit 1233 and the interim abundance targets set by NOAA Fisheries (Lohn 2002). A copy of the interim abundance standards is attached.

Lower Granite Dam Predicted Return of Naturally Produced Adult Spring/ Summer Chinook	Maximum Percent of Naturally Produced Adult Run Mortality for IDFG Recreational Fishery	Range of Potential Incidental Mortalities (Number of Adult Fish)	Estimated Number of Adults that may be Caught and Released
< 4,000	0%	$0^1$	-
4,001 to 6,400	0.25%	10 - 16	100 - 160
6,401 to 14,250	0.5%	32 - 71	320 - 710
14,251 to 21,400	0.75%	107 – 161	1,070 - 1,610
21,401 to 28,500	1.0%	214 - 285	2,140 - 2,850
28,501 to 35,600	1.5%	428 - 534	4,280 - 5,340
> 35,601	2.0%	> 712	> 7,120

To facilitate flexibility in crafting the specific locations and dates to harvest unlisted surplus hatchery production, the Department will consult with NOAA Fisheries to review the predicted return of unlisted, hatchery-produced, adult salmon as well as the predicted return of ESA-listed hatchery and naturally-produced adult salmon, the proposed fishing regulations, and incidental take quotas.

- 3. The Department and the Oregon Department of Fish and Wildlife (ODFW) may jointly initiate a fishery on the Snake River, where it forms the boundary between the states of Oregon and Idaho. If such a fishery is conducted, it will be conditional on ODFW adopting reciprocal regulations, and reporting harvest and incidental take within the limits requested in this application.
- 4. The Department and the Washington Department of Fish and Wildlife (WDFW) may jointly initiate a fishery on the Snake River, where it forms the boundary between the states of Washington and Idaho. If such a fishery is conducted, it will be conditional on WDFW adopting reciprocal regulations. The Department's incidental take will be within the terms and conditions requested in this application. If Washington requests and the Department provides incidental take

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<sup>&</sup>lt;sup>1</sup> As noted in paragraph 1 above, a fishery is allowed on the Little Salmon River, if more fish than are need for broodstock are expected to return to the Rapid River Hatchery.

coverage pursuant to this permit, the WDF&W fishery will in accordance with the terms and conditions of this permit. Joint fisheries in this reach of the Snake River will be reported by the Department, and by the WDF&W to ensure that harvest objectives and joint (or separate) incidental take limits are not exceeded.

- 5. On the South Fork Salmon River, the annual incidental take caps are determined according to NOAA Fisheries 2000 Biological opinion (NMFS 2000); see attached letter from Dygert (2004). NOAA Fisheries will review the predicted return of unlisted, hatchery-produced, adult salmon as well as the predicted return of ESA-listed hatchery and naturally produced adult salmon, the proposed fishing regulations, and incidental take quotas. The Department's fishery will be in compliance with total incidental take limits for that year. In any year when a fishery occurs in both the Lower Salmon River to target returns to the South Fork Salmon River, the incidental mortality of ESA listed adults bound for the Poverty Flat Index Area, and South Fork Salmon River Weir that occurs in the Lower Salmon River Fishery will be subtracted from the allowable impact to these areas as described in NOAA Fisheries 2000 Biological Opinion (NMFS 2000).
- 6. The incidental catch-and-release of up to 100 threatened, adult, Snake River Basin steelhead, of which 5 might die.

<u>Steelhead Fishing Regulations.</u> The maximum number listed fish that may be encountered and that may subsequently die during implementation of the Steelhead Fishing Regulations is:

- 1. The incidental catch and release of up to 1.5 % of the adult, naturally produced listed Snake River fall chinook salmon counted over Lower Granite Dam, may be caught and released of which 10% of those caught and released may die. Adipose fin clipped fall chinook salmon less than 22 inches incidentally caught during steelhead fishing may be retained.
- 2. Up to 3.2 percent mortality (resulting from catch and release of up to 64 percent) of naturally produced Snake River Basin steelhead returning to Idaho, incidental to harvest of hatchery-produced steelhead may occur.

#### VI(B) Anticipated Impact on the Habitat.

Impacts of recreational fishing to habitat are typically, minor, short term and localized. They include such things as loss of fishing gear, littering and trampling of streamside vegetation. The Department makes every effort to minimize these kinds of impacts and to work with the public landowners to minimize and mitigate for such impacts.

#### VI(C) Steps Taken to Monitor, Minimize, and Mitigate Impacts.

Specialized Equipment, Methods and Means.

Statutes that govern operation of the Department of Fish and Game may be accessed on the World Wide Web at <a href="http://www3.state.id.us/idstat/TOC/36FTOC.html">http://www3.state.id.us/idstat/TOC/36FTOC.html</a>. Fishing rules adopted by the Commission for the 2004 and 2005 may be accessed at <a href="http://www2.state.id.us/fishgame/common/regulations/regulations.htm#fish">http://www2.state.id.us/fishgame/common/regulations/regulations.htm#fish</a>. In general, fishing regulations limit not only harvest, but also disturbance of fish, particularly adult spawners. Gear restrictions, such as the use of barbless hooks help minimize mortality when non-targeted species are caught and released. Some examples of the specialized rules that have been adopted to minimize impacts include:

- 1. It is unlawful to take or attempt to take adult or juvenile anadromous sockeye salmon.
- 2. It is unlawful to harass any chinook or sockeye by shooting at it, striking it, building an obstruction, or chasing it up or downstream in any manner.
- 3. It is unlawful to deposit, throw, place, allow or cause to pass any of the waters of this state any deleterious drugs, toxicants, chemicals, poisonous substances, explosives, electrical current, or other material which may tend to destroy, kill, disable, or drive away fish.
- 4. It is unlawful to catch, attempt to catch, or kill any species of fish whatever in any of the streams, rivers, lakes, reservoirs or waters of this state with any seine, net, spear, snag hook, weir, fence, basket, trap, gillnet, dip net, trammel net or any other contrivance
- 5. Restrictive regulations have been adopted for most anadromous waters, especially key production areas. These include for example Wild Trout regulations (2 trout limit, no size limits or gear restrictions) and Restrictive Special Rules, (e.g., Catch-and-Release, single barbless hooks, artificial flies and lures only, i.e., no bait. On the Middle Fork Salmon River no trout may be retained.
- 6. The August 7 closure date of the fishery in Redfish Lake reduces the possibility of incidentally catching listed *O. nerka* (residual sockeye) by curtailing fishing when most kokanee adults have ascended spawning streams and listed *O. nerka* remain in the lake. Disturbance of sockeye on redds due to fishing activities is precluded by closure of the fishery prior to the onset of spawning, which occurs in October.

The Department dedicates a substantial amount of time and effort to inform anglers and non-anglers regarding the conservation of native fishes. Subjects include fishing seasons and rules, fish identification, management rationale, and major threats to populations. We use printed material including, regulation pamphlets, news releases, and signs at

specific locations. We use radio and television contacts including call-in radio shows. We host public meetings and give presentations to schools, and a variety of sportsman's organizations and local civic groups. The high degree of compliance with fishing rules, particularly the adipose-clip rule for salmon and steelhead show that anglers understand and are willing to comply with these regulations. Illegal take of adult salmon and steelhead has been minimal.

#### **Detailed Monitoring Plans**

Monitoring programs to estimate the harvest and incidental mortality of listed salmon and steelhead are routinely conducted pursuant to existing permits. Specifically:

- 1. The kokanee fishery on Redfish Lake is monitored and reported each year pursuant to Permit #1150.
- 2. The chinook fisheries are monitored using a combination of roving creel surveys and check stations.
- 3. The steelhead fishery is monitored using a roving creel survey and a telephone survey.
- 4. While there is no annual monitoring of the resident fish fishery in the state's anadromous fish waters, past creel surveys have documented the low level of incidental encounters of listed salmon and steelhead.

### **Funding**

Funding is available to the Department to conduct implement monitoring programs, minimize and mitigate impacts through; 1) the sale of fishing licenses, 2) Lower Snake River Compensation Plan, 3) contracts with the Idaho Power Company and, 4) the Dingle/Johnson Program.

#### VI(D) Alternative Actions

Recreational fishing in Idaho provides substantial social, cultural and economic benefits to the citizens of Idaho and the nation. Contemporary fishery management theory and practice demonstrates that these substantial benefits can be derived from fishery resources on a sustainable basis. This application reflects only one element of the state's ongoing and evolving management program. The current practices of the Department as reflected in Statutes (Title 36 Idaho Code), regulations (IDFG 2003), and policies (IDFG 2001) clearly reflect the state's ongoing commitment to preserve, protect and perpetuate the fishery resources of Idaho.

Management of the fishery resources in Idaho reflects an ongoing commitment to constantly evaluate and adapt the program so as to maximize benefits consistent with our statutory obligations to preserve, protect and perpetuate the fishery resources of the state. As such, alternative management strategies are constantly being developed and evaluated. Current regulations and policies and the protections proposed in this application provide substantial protection for ESA listed species, and are more than adequate to provide for

recovery when and if the primary factors that limit productivity (e.g. operation of the federal hydropower system) are controlled.

#### VI(E) Data Sources

- Dygert, Peter. 2004. Letter to Cindy LeFleur, Keith Kutchins, Joe Oatman, Sharon Kiefer and Kathryn Kostow dated February 13, 2004 regarding criteria for evaluating fishing proposals in the South Fork Salmon River. NOAA Fisheries, Seattle.
- Idaho Department of Fish and Game. 1993. Application for the Individual Incidental Take Permit for Sport Fisheries under the Endangered Species Act. IDFG Boise, March 15, 1993.
- Idaho Department of Fish and Game. 2001. Fisheries management plan 2001 2006. IDFG Boise. 306 pgs.
- Idaho Department of Fish and Game. 2003. Fishing seasons and rules, including steelhead for 2004 2005. IDFG Boise.
- Interior Columbia Basin Technical Recovery Team. July 2003. Working Draft Independent populations of chinook, steelhead, and sockeye for listed evolutionarily significant units within the Interior-Columbia River Domain. NOAA Fisheries, Seattle. 171 pgs.
- Lohn, B. 2002. Interim abundance and productivity targets for Interior Columbia Basin salmon and steelhead listed under the Endangered Species Act. Letter to Frank Cassidy Jr. Chairman, Northwest Power Planning Council. April 4, 2004.
- Marmorek, D.R. (Editor) and twenty-one additional authors. 1996. Plan for analyzing and testing hypotheses (PATH): final report on retrospective analyses for fiscal year 1996. Compiled and edited by ESSA Technologies Ltd., Vancouver, B.C.
- National Marine Fisheries Service 2000. Endangered Species Act Section 7 Consultation. Biological Opinion: Impacts of Treaty Indian and Non-Indian Fisheries in the Snake River Basin in Year 2000, on Salmon and Steelhead listed Under the Endangered Species Act. NOAA Fisheries, Seattle. 62 pgs.
- National Marine Fisheries Service 2002 Biological Opinion: Issuance of Modification 1 to Section 10(a)(1)(B) Incidental Take Permit 1233 for Recreational Fisheries Conducted by Idaho Fish and Game. Consultation Number F/NWR/2001/01465. NOAA Fisheries, Portland. 62 pgs.
- State of Idaho. 1997. State of Idaho comments to the National Marine Fisheries Service. Proposed Listing of Snake River Steelhead for Protection under the Federal

- Endangered Species Act. Capitol Building. Boise, Id. 53 p. plus figures, tables, and appendices.
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- U.S. Department of Commerce. National Oceanic and Atmospheric Administration. 1991. 50 CFR Part 227. Endangered and Threatened Species; Threatened Status for Snake River spring/summer chinook salmon and Snake River Fall Chinook Salmon. Final Rule. Vol. 57, No. 78. pp 14653-14663. April 22, 1992.
- U.S. Department of Commerce. National Oceanic and Atmospheric Administration. 1991. 50 CFR Parts 222 and 227. Endangered and Threatened Species: Listing of several Evolutionarily Significant Units (ESUs) of West Coast Steelhead. Final Rule. Vol. 62, No. 159. pp 43973-43976. August 18,1997.
- West Coast Salmon Biological Review Team. 2003. Preliminary conclusions regarding the updated status of listed ESUs of West Coast salmon and steelhead. Comanager review draft, February 2003. NOAA Fisheries. Seattle.

#### Certification

Virgil K. Moore, Chief

I hereby certify that the foregoing information is complete, true, and correct to the best of my knowledge and belief. I understand that this information is submitted for the purpose of obtaining a permit under the Endangered Species Act of 1973 (U.S.C. 1531 et seq.) and regulations promulgated there under, and that any false statement may subject me to the criminal penalties of 18 U.S.C. 1001, or to penalties under the Endangered Species Act of 1973.

Bureau of Fisheries		
	Data	
	Date:	

# Attachment 1 Biological Assessment of Proposed Action

The primary change in Modification 1 to Permit 1233 issued December 6, 2002 we have proposed is to extend the sliding incidental mortality take scale for the spring run component of Snake River spring/summer chinook, to include the summer run component. Secondarily, the proposed action we have proposed is to provide needed flexibility in the dates when and locations where fisheries may occur. In keeping with the current permit, the new permit will also establish a process whereby NMFS annually reviews data and predictions of the number and composition of returning Snake River spring/summer chinook salmon, population status and trends of listed and unlisted salmon populations prior to authorizing the state-operated recreational fisheries in the Snake River Basin. Although the action of conducting fisheries is expected to effect listed species, the proposed permit modification is intended to provide for sensitive, responsive, scientifically founded fishery management scheme to control the affects to listed salmon populations within conservative limits while allowing harvest of unlisted species.

For management purposes the run of spring/summer chinook salmon crossing Lower Granite Dam has traditionally been spilt into a spring run (those fish arriving before June 18) and a summer run (those fish arriving between June 18 and August 17). The recent advent of marking large numbers of Snake River chinook that have been traditionally classified as spring or summer runs with PIT tags has provided valuable insight into the migratory timing past dams on the mainstem Columbia and Snake rivers. These data show that for an individual stock, there is a clear progression in the arrival time at these dams with five-year old fish arriving first, followed by four-year-old fish, and last by three-year-old fish. While there are also differences in the timing for different stocks of the same age, overall, there is considerable overlap in the time of arrival for stocks typically classified as spring or summer run fish. This new information has led to a general consensus among the Parties to U.S. vs. Oregon to combine Snake River spring and summer run components for fishery management purposes in the mainstem of the Columbia River as they re-negotiating the Columbia River Management Plan, and to a recognition by NOAA Fisheries and IDFG that the historic approach of separating spring runs from summer runs at Lower granite Dam based of dates is not accurate and provides little, if any conservation benefit to the listed ESU.

The variable survival from juvenile to adult, and migratory nature of salmon populations makes annual predictions of run size and composition uncertain. In up-river areas such as the Snake River basin, the additional variables of migration timing and survival during upstream passage add uncertainty to annual pre-season predictions of run abundance. Fishery managers are unable to predict precisely the numbers, composition or arrival time of returning fish until they actually enter the Snake River. It is impossible to estimate the interception rates of listed fish passing through the recreational fishery until the fishery is actually being conducted. Quite often the actual returns to the Idaho portion of the Snake River basin vary by plus or minus 50% from preseason predictions and weekly run

updates may vary more than 10%. For fishing regulations to be adequately protective, yet flexible enough to quickly adapt to changes in run timing and composition, it is often necessary to adjust seasons, regulations and take limits immediately before or during the fishing season. The past practice of setting seasons and providing annual permit modifications based on pre-season predictions has failed to be flexible and cannot be completed in a timely manner. In Modification 1 to Permit 1233, NOAA Fisheries established conservative sideboards by adopting a sliding incidental take scale within which in-season adjustments may be made, based on analysis of the most current data. This sliding take scale approach to scaling impacts ensures a more conservative impact at smaller run sizes, and allows the impact to gradually increase as the run approaches or exceeds the interim recovery goal. In this application, the sliding incidental take scale established in Modification 1 to Permit 1233 has been logically extended to include the summer run component.

Fishing regulations for adult chinook salmon in the Idaho fisheries have been very conservative, even before listing of Snake river spring/summer chinook under the ESA and designed to avoid the incidental catch and release of naturally produced fish. For example, only a small fraction of the river miles occupied by salmon are typically open to fishing, and the open areas are restricted to the times and places where hatchery-produced fish are expected to be most abundant. Harvest is restricted to hatchery-produced fish that are marked by an excised adipose fin, and fishing tackle is restricted to barbless hooks to reduce injuries and facilitate release of listed fish that may be hooked.

The primary factor that has driven abundance of Snake River Spring/summer chinook is smolt to adult survival rates. When populations levels in the ESU decline to low levels, Snake river spring/summer chinook salmon require maximum practical protection to insure survival and recovery, however, restrictions can be relaxed as abundance increases. The sliding incidental take scale developed in Modification 1 to Permit 1233 provides a mechanism for controlling incidental mortality associated with recreational fishing that is both responsive to highly variable population levels while at the same time providing the necessary adaptive management flexibility for pre-season and in-season regulation adjustments to ensure that regulations are adequately protective. Considering our inability to accurately differentiate spring run from summer run fish, we believe it is a logical extension to include summer run fish in the sliding scale for annual analysis of spring/summer chinook fishery proposals.

The proposed new sliding scale in this application was modified from the sliding scale authorized in Modification 1 to Permit 1233 by adding the interim abundance target for summer run fish to the interim abundance target of spring run that was the basis for the original sliding scale, and applying the same percent mortality rates to the same percent of annual abundance relative to the interim abundance target. The proposed sliding scale will be composed of adult spring/summer chinook passing Lower Granite Dam as follows: 1) no incidental take will be allowed, except for limited terminal areas, when fewer than 4,000 natural adults cross Lower Granite Dam, 2) the total incidental take of listed Snake River spring summer chinook salmon adults in recreational fisheries will be no more than 0.25 % of the total run when between 4,001 and 6,400 wild/natural adults

pass lower Granite Dam, 2) the incidental take will not exceed 0.5% of the number of wild/natural adults when the run is between 6,401 and 14,250 adults, 3) the incidental take will not exceed 0.75% of the fish when the run is between 14,251 and 21,400, 4) the incidental take will not exceed 1.0% when the total run is between 21,401 and 28,500, 5) the incidental take will not exceed 1.5% when the run is between 28,501 and 35,600, and 6) the incidental take will not exceed 2.0% when the total run is in excess of 35,601 (Table 1).

Table 1. Proposed sliding scale for IDFG recreational fishing impacts on listed adult Snake River spring/summer chinook when fishing in the Snake River, Clearwater River and Salmon River below the South Fork.

Lower Granite Dam Predicted Return of Adult Wild Listed Spring/ Chinook	Maximum Percent of Adult Wild Run Mortality for IDFG Recreational Fishery	Range of Potential Incidental Mortalities
< 4,000 *	0%	0
4,001 to 6,400 *	0.25%	10 - 16
6,401 to 14,250	0.5%	32 - 71
14,251 to 21,400	0.75%	107- 161
21,401 to 28,500	1.0%	214 - 285
28,501 to 35,600	1.5%	428 to 534
> 35,601	2.0%	>712

<sup>\*</sup> At these low run sizes fisheries may be restricted to terminal areas.

To insure that major components of the ESU are not subject to a substantially greater incidental harvest impact than the percentage specified in the sliding scale, we will evaluate each year's proposal. For example, the preliminary preseason forecast for 2004 is 40,800 adult wild/natural spring/summer chinook salmon; the sliding scale will allow an incidental mortality of 2.0%. In our analyses of the proposed fisheries, we will assess whether incidental mortality to major drainages will substantially exceed 2.0 %, and if so, whether or not this higher rate is compensated for by reductions in overall impacts in other major drainages of the ESU.

Application of the sliding scale could also affect which river sections may be open to fishing for chinook salmon in a year. In a year like 2004, with a preseason prediction 119,900 hatchery-produced salmon, and a preseason prediction of naturally-produced fish that is equal to approximately 97% of the interim recovery target, (40,800 / 41,900 = .97) a large portion of allowable river sections may be proposed to be open to fishing.

Alternatively, in a year like 2003 when preseason predictions were less than one-half the 2004 prediction, mixed stock fisheries such as the lower main stem of the Snake River were not opened to fishing. In the case of a predicted return of fewer than 10,000 naturally-produced fish, incidental impacts to listed fish would be limited to 50 or fewer, and it is likely that the open fisheries would be restricted to areas where few listed fish are expected to occur such as the Clearwater River, the Little Salmon River below Rapid River and the Snake River reach immediately below Hells Canyon Dam. Also, in years of poor natural returns, there is likely to be poor hatchery returns and the recreational fishing season length and bag limit is likely to be restricted compared to years with larger returns.

By including the summer run component in the sliding take scale, and recalibrating the allowable take to the combined interim abundance target of spring and summer run chinook, there has been no material change in the approach taken for managing fishing impacts to the Snake River ESU, or in the relative impact to the ESU over that authorized in 2002. In Modification 1 to Permit 1233, NMFS determined that the level of incidental harvest-related mortality in the sliding scale would not reduce the long-term survival and recovery of listed Snake River spring/summer chinook. NMFS' conclusion was based on 1) the low incidental mortality of listed fish as a result of catch-and-release in the proposed fisheries, 2) the finding that the mortality of listed fish will not appreciably reduce the abundance, long-term population growth rate, spatial distribution, and genetic diversity of listed populations, 3) the large proportion of unlisted hatchery fish in the fishery areas, which will be selectively targeted by the fishery, and 4) coordination of the annual IDFG fishery proposals within a review that addresses the other state and Tribal fisheries within the Snake River basin that are proposed to occur each year. NMFS also concluded that annual review of the recreational fisheries managed by the Department, will assure that the long-term aggregate impacts of recreational fisheries do not reduce the likelihood if survival and recovery of these populations. These same factors have led the Department to conclude that the proposed modification of Permit 1233 to include the summer run component, and the small changes in the times and locations where fisheries may occur, will not jeopardize the continued existence of listed Snake River spring/summer chinook salmon nor result in any destruction or adverse modification of critical habitat.

The proposed modification does not result in any additional take of listed Snake River fall chinook salmon, steelhead, or sockeye salmon.